

Title (en)

FUSION FORMABLE SODIUM CONTAINING GLASS

Title (de)

FUSIONSVERFORMBARES NATRIUMHALTIGES GLAS

Title (fr)

VERRE CONTENANT DU SODIUM POUVANT ÊTRE MIS EN FORME PAR FUSION

Publication

**EP 2445845 A2 20120502 (EN)**

Application

**EP 10722264 A 20100527**

Priority

- US 2010036371 W 20100527
- US 18238609 P 20090529
- US 78771110 A 20100526

Abstract (en)

[origin: US2010300535A1] Sodium-containing aluminosilicate and boroaluminosilicate glasses are described herein. The glasses can be used as substrates for photovoltaic devices, for example, thin film photovoltaic devices such as CIGS photovoltaic devices. These glasses can be characterized as having strain points  $\geq 540^{\circ}$  C., thermal expansion coefficient of from 6.5 to 9.5 ppm/ $^{\circ}$  C., as well as liquidus viscosities in excess of 50,000 poise. As such they are ideally suited for being formed into sheet by the fusion process.

IPC 8 full level

**C03C 3/087** (2006.01)

CPC (source: EP KR US)

**C01B 19/007** (2013.01 - EP US); **C03C 3/087** (2013.01 - EP KR US); **C03C 3/091** (2013.01 - EP KR US); **H01L 31/0296** (2013.01 - US); **H01L 31/0322** (2013.01 - US); **H01L 31/03923** (2013.01 - US); **H01L 31/03925** (2013.01 - US); **H01L 31/0445** (2014.12 - US); **C01P 2006/40** (2013.01 - US); **Y02E 10/541** (2013.01 - EP US); **Y02E 10/543** (2013.01 - EP US)

Citation (search report)

See references of WO 2010138698A2

Citation (examination)

- JP 3666609 B2 20050629
- JP H11180727 A 19990706 - CENTRAL GLASS CO LTD
- JP 3804115 B2 20060802

Designated contracting state (EPC)

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DOCDB simple family (publication)

**US 2010300535 A1 20101202**; **US 9637408 B2 20170502**; AU 2010253992 A1 20120202; CA 2762873 A1 20101202; CN 102574726 A 20120711; CN 109264990 A 20190125; EP 2445845 A2 20120502; JP 2012528071 A 20121112; JP 2015171994 A 20151001; JP 2017114762 A 20170629; JP 2019006677 A 20190117; KR 101914400 B1 20181101; KR 20120026577 A 20120319; KR 20170102565 A 20170911; KR 20180120783 A 20181106; MX 2011012667 A 20111216; RU 2011152979 A 20130710; SG 176267 A1 20120130; TW 201111317 A 20110401; TW I565674 B 20170111; US 2017250296 A1 20170831; WO 2010138698 A2 20101202; WO 2010138698 A3 20110120

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